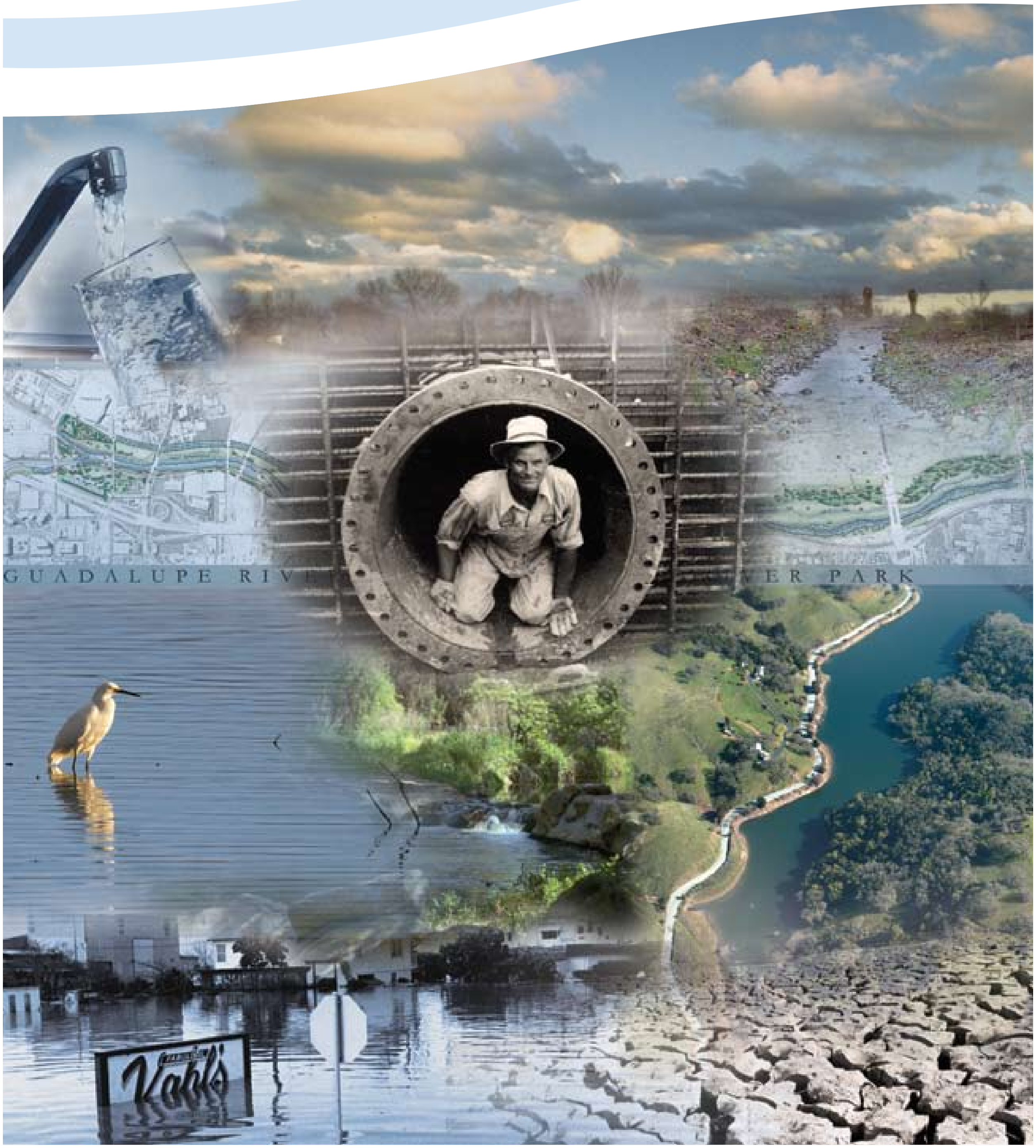
VALLEY WATER

A Profile of the Santa Clara Valley Water District



Santa Clara Valley Water District℠

Protecting Your Future

OVERVIEW

The Santa Clara Valley Water District is the comprehensive water management agency for the residents of Santa Clara County. It supplies clean and safe water, manages our local groundwater basins, implements flood protection projects and provides watershed stewardship. It serves approximately two million people — 1.8 million residents and 200,000 commuters — in 15 cities and unincorporated areas in the 1,300-square-mile county.

The cities it serves are Campbell, Cupertino, Gilroy, Los Altos Hills, Milpitas, Monte Sereno, Morgan Hill, Mt. View, Palo Alto, San Jose, Santa Clara, Saratoga and Sunnyvale, and the towns of Los Altos and Los Gatos.

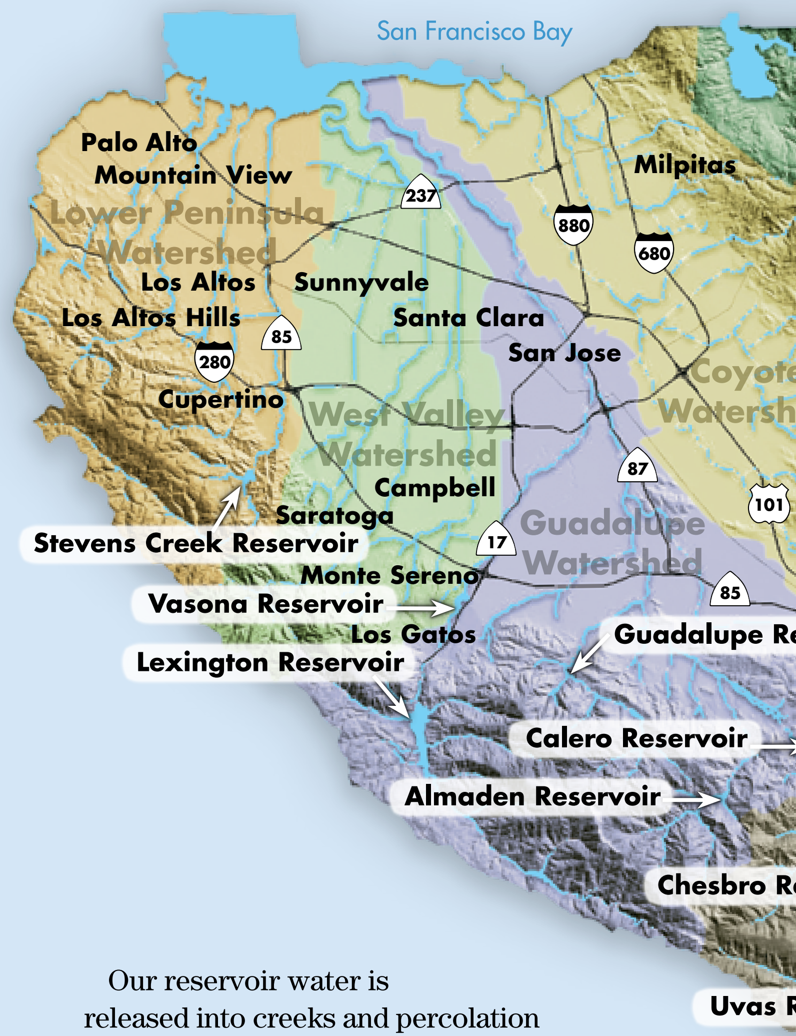
The water district is a special district, formed by the California Legislature in 1929. It has a seven-member Board of Directors. Five members are elected from the same geographical districts within the county as the Board of Supervisors and two are at-large members.

The water district's mission is:

> “*A healthy, safe, and enhanced quality of living in Santa Clara County through watershed stewardship and comprehensive management of water resources in a practical, cost-effective, and environmentally sensitive manner.*”

WATER SYSTEM

To maintain maximum efficiency, flexibility and reliability, the water district has developed and relies upon a diversified portfolio of water sources. About half the water used in the county originates hundreds of miles away in the Sierra Nevada and is delivered through the Sacramento-San Joaquin River Delta or the Hetch Hetchy system. Most of the remainder comes from local rainfall, much of which is captured in the water district's ten local reservoirs.

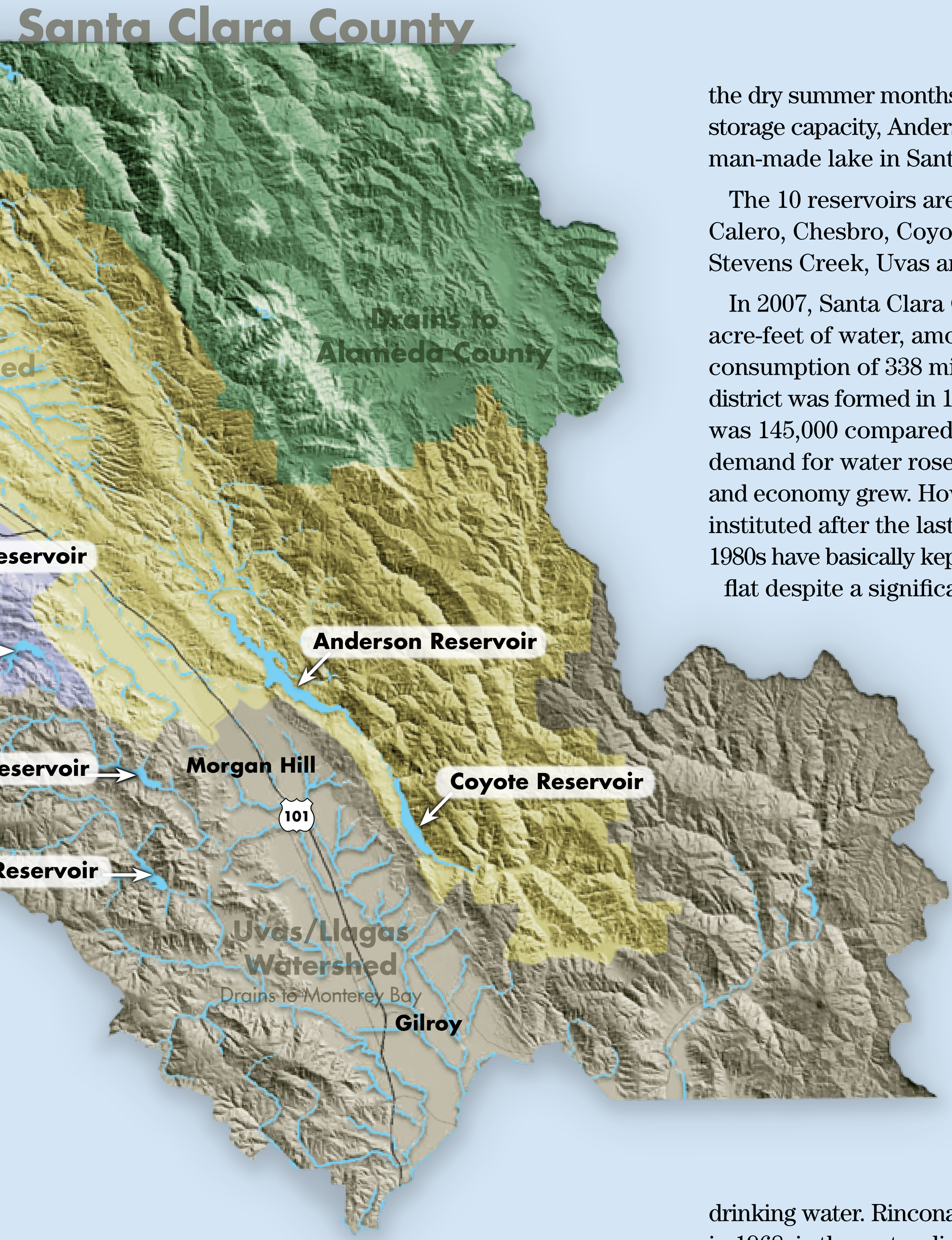


Our reservoir water is released into creeks and percolation ponds to replenish local groundwater aquifers and manage environmental needs, or is piped directly to a water treatment plant. Recycled water is used throughout the county as well. To provide greater reliability, the district also "banks" water in groundwater storage outside of the county, which can be called upon during dry times.

The water district sells treated water to 13 local water retailers, such as the San Jose Water Company, which, in turn, provide it to their customers. The water district also manages the groundwater basins, which is the source of nearly half of the county's water supply.

Reservoirs

The water district owns and operates 10 reservoirs, which contain 25 percent of Santa Clara County's water supply. The reservoirs have a total storage capacity of approximately 170,000 acre-



feet. (One acre-foot equals 326,000 gallons of water, which is enough to serve the needs of two households of five for one year.)

Although constructed for water supply, the reservoirs also provide incidental flood protection by containing runoff early in the rainfall season. In addition, these reservoirs are open to recreation and benefit the environment by allowing for releases of water to keep creeks flowing during the dry summer months. With 90,373 acre-feet of storage capacity, Anderson Reservoir is the largest man-made lake in Santa Clara County.

The 10 reservoirs are: Almaden, Anderson, Calero, Chesbro, Coyote, Guadalupe, Lexington, Stevens Creek, Uvas and Vasona.

In 2007, Santa Clara County used about 379,100 acre-feet of water, amounting to a daily average consumption of 338 million gallons. When the district was formed in 1929, the county's population was 145,000 compared with 1.8 million today. The demand for water rose as the county's population and economy grew. However, conservation efforts instituted after the last major drought in the late 1980s have basically kept the county's water demand flat despite a significant rise in its population.

Treatment Plants

The water district provides water that meets or exceeds all drinking water quality standards. The water district owns and operates three water treatment plants — Santa Teresa in south San Jose, Penitencia in east San Jose, and Rinconada in Los Gatos. Together, the three plants can deliver up to 220 million gallons a day (MGD) of clean drinking water. Rinconada, which began operation in 1968, is the water district's first treatment plant and Santa Teresa Water Treatment Plant is the largest, with a peak capacity of 100 MGD.

To ensure continued high-quality and better tasting drinking water, the water district has recently implemented an advanced technology water purification process known as ozonation at the Santa Teresa and Penitencia water treatment plants. At these two plants, ozone, rather than chlorine, is used as the primary disinfectant.

Water Quality Lab

The water district has completed construction of a new $17.5 million “state-of-the-art” water quality laboratory to meet increasing needs for water sampling and ever more rigorous testing. It replaces a lab which was built in 1968 when the water district tested 1,000 samples annually. Today, the water district tests approximately 140,000 samples a year.

EPA
WATER EFFICIENCY
LEADER AWARD

Conservation

With limited water sources and a growing population, water conservation is essential to ensure that we have a reliable supply of water today and tomorrow. The water district has been championing water conservation since the last major drought in the late 1980s, resulting in billions of gallons of water savings a year. These conservation efforts have resulted in 10 percent savings in Santa Clara County’s annual water demand and the water district plans to double this amount by 2030. For its efforts to save water, the district has been honored with the national U.S. Environmental Protection Agency 2007 Water Efficiency Leader Award.

The water district has nearly 20 different conservation programs, which offer a mix of incentives and rebates, free device installation, one-on-one home visits, site surveys and educational outreach to reduce water consumption in homes, businesses and agriculture. Financial incentives for residents and businesses include rebates on high-efficiency toilets, clothes washers, water-efficient landscape materials and efficient irrigation equipment.

In addition, the water district also carries out an award-winning education and outreach program reaching school children, youth and the community at large.

Recycling and Desalination

Recycled and desalinated water supplies are often described as “drought-proof” and “all-weather” sources of water. The water district is committed to expanding the use of recycled water. Today, there are growing partnerships with San Jose, Gilroy, Palo Alto and Sunnyvale. Currently, about four percent of the county’s total water use is from recycled water. Its usage is limited primarily to landscaping. In the future, recycled water will become an even bigger component of the water district’s supply mix. The target is to increase recycled water use in the county to 10 percent by 2020.

Desalination removes salts from the ocean or other salty water to produce fresh water through distillation or filtration. The water district has joined with three other large Bay Area water agencies to jointly explore the feasibility of building a regional desalination plant using membrane filtration technology. The other participating water agencies are the East Bay Municipal Utility District, the San Francisco Public Utilities Commission and the Contra Costa Water District. Pilot work has begun to turn brackish water from Suisun Bay in Contra Costa County into fresh water.

WATERSHED STEWARDSHIP

The water district manages five watersheds — Lower Peninsula, Guadalupe, Coyote, West Valley, and Uvas/Llagas — providing flood protection and supporting recreation and habitat restoration. These efforts are underpinned by its commitment to environmental stewardship, which has earned the district the world-class ISO 140001 certification.

Protecting People and Property

Protecting homes, businesses and transportation networks from the devastating effects of floods is one of the main jobs of the water district. Through the years as the county's population and economy have grown, the water district has worked hard to keep pace with ongoing stream maintenance and construction of flood protection projects. Since the early 1980s, the water district has invested more than a billion dollars in flood protection programs, including constructing major flood protection projects, and protected more than 93,000 properties in previously flood-prone areas.

Natural Flood Protection

The water district is a nationally recognized leader in multi-purpose flood protection by undertaking projects that combine flood protection with habitat enhancement and restoration as well as recreation. Two such major projects — the lower and downtown Guadalupe River projects — were completed in recent years. Together, the projects tame 10 miles of the river and protect an estimated 95,000 people who live or work along the river in the cities of San Jose and Santa Clara. In addition, these projects create recreation opportunities by connecting what will be a 20-mile multi-use trail from Almaden Valley to San Francisco Bay, and help improve wildlife habitat by removing barriers that prevented migrating fish from making their way to upstream spawning grounds.

Clean, Safe Water in Creeks and Bays

Improving the quality of water in creeks and bays and maintaining the natural features of stream corridors contribute to enhancing Santa Clara County's quality of life, and are the key components of the water district's watershed approach. In the last five years, the water district has removed more than 30,000 cubic yards of trash and debris from neighborhood creeks and cleared bridges and floodwalls of more than 1.2 million square feet of graffiti.

Coyote Parkway Wetland

Healthy Creek & Bay Ecosystems

The water district also carries out environmental work that creates, protects and restores habitats as part of its general mission as well as contributing to targeted efforts to encourage the return of endangered species. One such example is the water district's partnership with the U.S. Fish and Wildlife Service to advance the ambitious South Bay Salt Pond Restoration Project to restore 15,000 acres of former salt ponds while simultaneously improving bay front flood protection.

Trails, Parks and Open Space

The water district partners with cities and the county to provide open space and recreational opportunities at many of its 10 reservoirs and along creeks throughout the county. More than 35 miles of creekside trails have been constructed since 2000 and about 80 miles more are planned in the coming years.

PREPARING FOR THE FUTURE

Climate Change

Earth's climate is changing. This poses significant challenges for water resource management. Increasing air and water temperatures, reduced Sierra snowpack, altered rainfall patterns and hydrology (the timing and amount of flow in a creek or river), and rising sea levels will all affect our region and its water resources. We could experience more severe droughts or floods or both.

In addition, rising sea levels will put our bay front communities at greater risk. Overall, the increase in uncertainty as to what the future holds makes planning for sustainability and maintaining the community's quality of life that much more difficult.

The water district is addressing the climate change challenge and related uncertainties at two levels — by taking action to not exacerbate the problem, and incorporating an assessment of climate change implications into all water district activities. The water district is specifically incorporating adaptation to climate change vulnerabilities and risks into its water supply, flood management, business and strategic plans.

In 2008, the water district board of directors instituted an aggressive policy to pursue carbon neutrality as district goal. The water district has already changed the way it manages energy usage and has optimized its operations for maximum energy efficiency. The district's water conservation programs also make a significant contribution to energy savings in the county.

In 2006, 96 percent of the energy used by the water district was generated from renewable sources. Over the last 15 years, the water district's water conservation and recycling programs have saved over 1.4 billion kilowatts of energy, and reduced air pollution by an equivalent amount of removing 72,000 cars from the roads.

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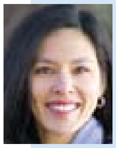
BOARD OF DIRECTORS



Rosemary Kamei — District 1

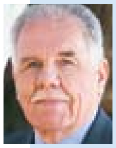
Gilroy, Morgan Hill, Los Gatos, portions of San Jose and unincorporated areas.

Joe Judge — District 2

Portions of San Jose.

Richard Santos — District 3

Milpitas, portions of San Jose including Alviso, parts of Sunnyvale and unincorporated areas.



Larry Wilson — District 4

Portions of Santa Clara, Campbell and San Jose.

Patrick Kwok — District 5

Palo Alto, Stanford, Los Altos, Los Altos Hills, Mountain View, Cupertino, Saratoga, Monte Sereno, and portions of Sunnyvale and San Jose.

Tony Estremera — North at Large

Area defined by the 1967 Santa Clara Valley Water Conservation District boundaries.

Sig Sanchez — South at Large

Area defined by 1967 Gavilan Water Conservation District boundaries.

To provide feedback or contact the water district, call (408) 265-2600, or use our online Access Valley Water customer service center at

WWW.VALLEYWATER.ORG

Santa Clara Valley
Water District℠

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